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| APPLICATION NO.                            | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--|----------------------|---------------------|------------------|
| 10/573,950                                 | 03/29/2007   | Thomas Nissl         | 047956/307840       | 7925             |
| 37305 7590 06/01/2009<br>ALSTON & BIRD LLP |  |                      | EXAMINER            |                  |
|  | ERICA PLAZA  | MILLER, CHERYL L     |                     |                  |
| SUITE 4000                                 | 101 SOUTH TRYON STREET<br>SUITE 4000<br>CHARLOTTE, NC 28280-4000 |                      | ART UNIT            | PAPER NUMBER     |
| CHARLOTTE,                                 |  |                      | 3738                |                  |
|  |  |                      |                     |                  |
|  |  |                      | MAIL DATE           | DELIVERY MODE    |
|  |  |                      | 06/01/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |   | Application No.                    | Applicant(s)          |  |  |  |  |
|--|---|------------------------------------|-----------------------|--|--|--|--|
| Office Action Summary  |   | 10/573,950                         | NISSL ET AL.          |  |  |  |  |
|  |   | Examiner                           | Art Unit              |  |  |  |  |
|  |   | CHERYL MILLER                      | 3738                  |  |  |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply  | ears on the cover sheet with the c | orrespondence address |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                    |                       |  |  |  |  |
| Status   |   |                                    |                       |  |  |  |  |
| 1)[\]  | Responsive to communication(s) filed on 19 Fe   | shruary 2000                       |                       |  |  |  |  |
| · ·  | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |                                    |                       |  |  |  |  |
| ′—   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                                    |                       |  |  |  |  |
| ٥/ك  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.               |                                    |                       |  |  |  |  |
| Dispositi  | on of Claims  |                                    |                       |  |  |  |  |
| 4)⊠  | Claim(s) 1 and 4-15 is/are pending in the applic  | cation.                            |                       |  |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                    |                       |  |  |  |  |
|  | 5) Claim(s) is/are allowed.   |                                    |                       |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  | 6)⊠ Claim(s) <u>1 and 4-15</u> is/are rejected.   |                                    |                       |  |  |  |  |
| =  | Claim(s) is/are objected to.  |                                    |                       |  |  |  |  |
| -  | Claim(s) are subject to restriction and/or  | r election requirement.            |                       |  |  |  |  |
|  | on Papers   | ·                                  |                       |  |  |  |  |
|  |   |                                    |                       |  |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |                                    |                       |  |  |  |  |
| 10)  |   |                                    |                       |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).         |                                    |                       |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                                    |                       |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                                    |                       |  |  |  |  |
| Priority u   | ınder 35 U.S.C. § 119   |                                    |                       |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |                                    |                       |  |  |  |  |
| Attachment(s)  |   |                                    |                       |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  |   |                                    |                       |  |  |  |  |
| 73) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 4/28/2009.  5) Notice of Informal Patent Application 6) Other:  |   |                                    |                       |  |  |  |  |

## DETAILED ACTION

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## Response to Arguments

Applicant's arguments with respect to claims 1 and 4-14 have been considered but are moot in view of the new ground(s) of rejection.

The declaration under 37 CFR 1.132 filed February 19, 2009 is insufficient to overcome the rejection of claims 1 and 4-14 based upon Mangiardi et al. (US 2004/0088040 A1) as set forth in the last Office action because: Bullet point 5 refers to the incorrect application number (050' instead of 950'). Further, in order to overcome a 102(e) with a common inventor, the publication must disclose however not claim the present claimed invention. Claim 9 of the 040' publication claims the flanges (head 30). See MPEP 716.10.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4-14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mangiardi et al. (US 2004/0088040 A1). See figures 1 and 8.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37

CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 1, 4, and 7-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller et al. (US 2002/0022877 A1). Mueller discloses a stent (1) comprising a support frame (see fig.1, 8) that is expandable from an initial state (dotted lines in fig.2) to a support state (solid lines in fig.2) comprising at least two annular segments (8) formed by struts interconnected in a corrugated manner (see fig. 1 for example) by transitional sections (12, 22 or 10.1, 10.2), adjacent annular segments (8) connected by connectors (20), wherein one annular segment (8) is at a proximal end and another annular segment (8) is at a distal end of the stent (see fig.8; fig.1 discloses end segments 8 are same as others, however not shown in figures, P0048), wherein every other transition section has a widened head end (12) projecting proximally from a proximal end and distally from a distal end (ends not shown, however inherent as the pattern is repeated, end segments 8 are the same without the connectors 20), head (12) having a convex front section (free end surface), convex edge section (side of head 12) and concave throat section (where connected to the linear struts of 10; see figs), the concave throat sections configured to intermesh with adjacent transitional sections (22) in the initial state (shown as dotted lines in fig.2), wherein each of the struts are substantially parallel to one another in the initial state (see fig.1 wherein all struts including connectors are shown parallel and aligned with the longitudinal axis of the stent; P0045, P0047). Deflections elements have no structure associated with them in the claim, thus the space inside cells 10 may be considered the deflection elements as a string is capable of being looped through cell at an opposite end from the widened head (12). Mueller

shows connectors (20) to extend from a ridge of an annular segment (8) to a transitional segment (12 or 22) of an adjacent annular segment (8; see figs). Mueller shows connectors (20) aligned. Mueller's widened head ends (12) are shown projecting further axially from the rest of the stent. Mueller shows convex transition sections (22) configured to intermesh with adjacent concave throat sections (see figs). It is noted that "intermesh" does not necessarily require the elements to touch or contact one another, they just need have similar contours.

Claims 1, 4, 7, and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US 2004/0176834 A1). Brown discloses a stent (embodiment shown in fig.9; P0066) comprising a support frame (seen in fig.9) that is expandable from an initial state to a support state (P0002) comprising at least two annular segments (720) formed by struts (linear elements of 720) interconnected in a corrugated manner (see fig.9) by transitional sections (736, 740), adjacent annular segments (720) connected by connectors (744), wherein one annular segment (720) is at a proximal end and another annular segment (720) is at a distal end of the stent (fig.9; top and bottom rings 720), wherein every other transition section (736, 740) has a widened head end projecting proximally from a proximal end and distally from a distal end (fig.9), head (every other 736 at proximal end, top of fig and every other 740 at distal end, bottom of fig.9) having a convex front section (free end surface), convex edge section (side of head) and concave throat section (where connected to the linear struts see fig.9, the claimed curvatures are seemingly shown in fig.9), the concave throat sections configured to intermesh with adjacent transitional sections in the initial state (see fig.9; even capable of touching when compressed further), wherein each of the struts are substantially parallel to one another in the

initial state (see fig.9 wherein all struts are shown parallel and aligned with the longitudinal axis of the stent). Deflections elements have no structure associated with them in the claim, opposite ends of bands 720 may be considered the deflection elements as a string is capable of being looped through and around opposite transition sections (740 at top of page for example) at an opposite end from the widened head. Brown shows connectors (744) to extend from a ridge (740) of an annular segment (720) to a transitional segment (736) of an adjacent annular segment (720). Brown's widened head ends (736, 740 every other) are shown projecting further axially from the rest of the stent. Brown shows convex transition sections configured to intermesh with adjacent concave throat sections (see fig.9).

Claims 1 and 4-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Gomez et al. (US 2002/0198593 A1). Gomez discloses a stent (30; see figs.6a-7a for example) comprising a support frame (see figs) that is expandable from an initial state (fig.6c) to a support state (fig.6a, 6b, 7a) comprising at least two annular segments (40) formed by struts (66, 68) interconnected in a corrugated manner (see fig.6a for example) by transitional sections (peaks, valleys, apex), adjacent annular segments (40) connected by connectors (54), wherein one annular segment (40) is at a proximal end and another annular segment (40) is at a distal end of the stent (see fig.6a), wherein every other transition section has a widened head end (fig.6a) projecting proximally from a proximal end and distally from a distal end, head (peaks at ends of stent) having a convex front section (free end surface), convex edge section (side of head) and concave throat section (where connected to the linear struts of 66, 68; see figs), the concave throat sections configured to intermesh with adjacent transitional sections in the initial state

(fig.6c), wherein each of the struts are substantially parallel to one another in the initial state (all struts 66, 68 appear substantially parallel, generally aligned, it is noted struts are not required to be straight). Deflections elements have no structure associated with them in the claim, thus the valleys of segments (40) may be considered the deflection elements as a string is capable of being looped through segments at an opposite end from the widened head. Gomez shows connectors (54) to extend from a ridge of an annular segment (40) to a transitional segment of an adjacent annular segment (see fig.6b). Gomez shows connectors (54) aligned and having a longitudinal section and transverse section (58; see fig.6b). Gomez's widened head ends (every other peak at ends) are shown projecting further axially from the rest of the stent (fig.6a). Gomez shows convex transition sections (peaks of shorter struts) configured to intermesh with adjacent concave throat sections (mesh with transition sections of longer struts). It is noted that "intermesh" does not necessarily require the elements to touch or contact one another, they just need have similar contours, although Gomez's stent would seemingly be capable of further compression which would appear to make the adjacent struts and transition sections to contact and intermesh even more than what is shown in figures.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHERYL MILLER whose telephone number is (571)272-4755. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached at 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Cheryl Miller/ Examiner, Art Unit 3738

/Corrine M McDermott/ Supervisory Patent Examiner, Art Unit 3738